LOW DOSE Screening CHEST WITHOUT
16 Emotion

Indications	Majority of patients screened are between the ages of 55 and 80, Have a smoking history of 30 pack -years
	If no longer smoking, stopped smoking in the past 15 years, Persons who have undergone chest CT within 12 months should be excluded
	Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially
	limits life expectancy or the ability or willingness to have curative lung surgery.
Diagnostic Task	Detect abnormalities that may represent lung cancer and may require further diagnostic evaluation. Detect nodules and masses.
	For individuals with no known signs or symptoms of lung cancer that have appropriate risk factors, such as those recommended by
	professional societies and health care organizations.See the ACR LungCancer Screening Resources webpage for more information.
Scan mode	Helical
Position/Landmark	Head -Supine Craniocaudal
Topogram	AP 110 kv 30mA
kVp/Reference mass	110kVp 35mas/Care Dose on
Rotation time/pitch	0.6/pitch 1
Detector Configuration	16x0.6
Table Speed/Increment	9.6
Dose reduction	CareDose 4D
Allowed CTDI ranges*	0.25 mGy to 8 mGy
XR29 Dose Notification val	8 mGy

Helical Set

recon	body part	thickness spacing	kernel	window	recon destination
1	chest	2mmx 2mm	31medium smooth	mediastinum	pacs
2	lung	1.5mmx 1.5mm	70very sharp	lung	pacs
3	coronal chest	2mmx2mm	31medium smooth	mediastinum	pacs
4	sag chest	2mmx2mm	31medium smooth	mediastinum	pacs
5	axial MIP lung	10mmx2mm	B20f smooth	lung	pacs

Scan Start/end loca	lung apex lung base
DFOV	35cm decrease appropriately

Approximate Values for CTDIvol

Patient size	weight(kg)	weight(lbs)	CTDIvol(mGy)
SMALL	50-70	110-155	0.25-2.8
AVERAGE	70-90	155-200	0.5-4.3
LARGE	90-120	200-265	1.0-5.6

*The ACR Reference Dose for a "standard size patient" (by definition, is approximately 5' 7" and 155 lbs or 170 cm and 70 kg with a BMI of about 24) is a CTDIvol of less than 3 mGy.

*There is no AAPM recommended NEMA XR29 Dose Notification Value for lung screening scans. In general, lung screening exams should not have a CTDIvol greater than 7 mGy. Exams with CTDIvol values less than the minimum allowed range should not be

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performed unless approved by a radiologist.